# Comprehensive Examination

# Educational Technology Leadership Master’s Program

# Laura J. Lopez

# Lamar University

# **Comprehensive Examination of Educational Technology Leadership**

# This Comprehensive Exam will encompass my total internship experience as it relates to Lamar University’s Educational Technology Leadership Master’s Program. Topics to be addressed are my personal goals, leadership goals, vision for educational technology, knowledge I’ve gained through the program, reflection of the most beneficial courses, personal professional development plans over the next three years, and an update curriculum vitae of my professional background and experiences.

# **Career and Leadership Goals**

I am currently employed as a district level Instructional Technology Facilitator in the San Antonio Independent School District (SAISD). I have been employed with SAISD for five months. I was previously employed with the Southwest Independent School District in San Antonio for 12 years.

Throughout my career I have served in the following capacities: 5th Grade teacher, 5th Grade Level Facilitator, Campus Science Facilitator, Teacher Mentor through the Our Lady of the Lake Mentorship Program, served as a member of the District Science Committee, District Technology Committee, Campus Improvement Team, Campus Instructional Team, Campus Leadership Team, Coordinator of the Campus Technology Committee, and Campus Instructional Technologist.

In 2005, I was voted as Teacher of the Year for Kriewald Road Elementary. I was selected by committee and served as the 2005 District Teacher of the Year for the Southwest Independent School District. I was awarded the ExCEL Award for Excellence in Education, received the "Golden Apple" trophy, and was a nominee for the Trinity Prize for Excellence in Teaching.

My future aspirations are to become a District Level Technology Director. After adequate time and acquisition of the knowledge and skills of that position, I would like to advance to the level of an Executive Director or an Assistant Superintendent of Technology. I want to be in a position that will allow me the opportunity to “Establish a shared vision and strategic technology plan that would help move my organization in a new and exciting direction” (Casey, 2004, p. 26) and that would support and adequately prepare students to be productive citizens in a society that has become highly dependent on digital-age work.

**Vision of Educational Technology**

In my mind’s eye, I picture a learning environment, within each classroom that would adequately represent the digital age of the 21st century. It would be evident that teachers have learned how to “Put engagement before content when teaching and have paid attention to how their students learn, and value what their students know and are capable of doing” (Prensky, 2006, p. 2).

Teachers will have learned how to incorporate and capitalize on their student’s knowledge of digital communication, and “Have adopted and incorporated into their lessons new systems for communicating, (instant messaging), sharing (blogs), exchanging (peer-to-peer technology), creating (Flash), meeting (3D worlds), collecting (downloads), coordinating (wikis), evaluating (reputation systems), searching (Google), analyzing (SETI), reporting (camera phones), programming (modding), socializing (chat rooms), and even learning (Web surfing)” (Prensky, 2006, p. 2).

Understanding that none of the above would be possible without a highly effective technology plan that included and addressed the four essential components of technology implementation, as outlined by the STaR Chart, equitably in regards to planning and financial backing. These four areas are Teaching and Learning; Educator Preparation and Development; Leadership, Administration, and Instructional Support; and Infrastructure for Technology.

My vision of a model classroom and where I would like to see Instructional Technology be with in my district and beyond our boundaries, would be based on a realistic view of what could possibly be attained in five years and with the availability of funds. A main source of guidance and information I would refer to from the beginning would be the Horizon Report: 2009 K-12 Edition, which is “An ongoing research project that seeks to identify and describe emerging technologies likely to have a large impact on teaching, learning, research, or creative expression within education around the globe” (Johnson, Levine, Smith, and Smythe, 2009, p. 3).

Our district would have a well-developed technology plan that “Ensured all schools were equipped with the necessary technology hardware and infrastructure to meet the needs of the 21st century learner, and hardware standards were developed for each site” (Southwest Independent School District, 2009).

Also included in this plan would be “An approved list of computers, laptops, projectors, interactive boards and other technology related equipment that would be supported through the District Technology Division within our schools. These documents would be utilized as a guide for all campuses when planning or purchasing new technologies for a campus site. As technology progresses and upgrades to technologies are made, updates to the documents would also be made” (Southwest ISD Technology Department, 2009).

As a result of having all of the above in place and fully supported by both district and campus level administration, each classroom would be equipped with the following:

* 1 Mounted Interactive White Board
* 1 Interactive tablet
* 1 Mounted LCD projector
* Ceiling mounted speakers
* 1 dedicated teacher laptop
* 5 Desktop computers
* All computers loaded with Windows 2007
* All computers loaded with Microsoft Office 2010
* 1 Student Response System
* 1 High-end digital camera
* Flip camera
* Headset for each computer
* Tripod on wheels
* Flatbed scanner
* 42’or larger flat panel TV for smaller work groups mounted on a mobile cart
* Dedicated video origination capabilities consisting of 1 camera (mounted on same mobile cart as flat panel TV) used for:
  + Recording sessions
  + Video conferencing
  + Distance learning
* 5 Web Cams (at least one per Desktop) to allow for Desktop Video Conferencing
* Cable and satellite and internet based programming
* Adjustable light fixtures (dimmer switches).
* 5 Computers on Wheels per grade-level (w/25-30 laptops on each)
* 1 Document camera
* Continue to provide ongoing training and support

I realize that this list represents several thousands of dollars worth of spending and a tremendous amount of commitment from both district and campus allotted funds, but in order to meet the diverse “Needs of our mixed-ability classrooms” (Wahl & Duffield, 2005, p. 2), and help our educators prepare their students to become highly qualified wage earners in our “Increasing digital and networked world” (Armstrong & Warlick, 2004, p. 22), spending is both warranted and frankly, should be expected by all of our constituents.

**Knowledge Gained**

I have learned that despite my comfort in the use of technology, as far back as high school (in the late 80’s), I do not consider myself to be in the category of a “Digital native,” but rather more of a “Digital immigrant.” These terms were coined by Marc Prensky, in his work

*Digital Natives, Digital Immigrants* published in 2001.

When I decided to enroll in the online Master’s Program, I felt comfortable enough in my technology skills that I would be able to handle to it. However, I quickly realized that, because I am indeed a digital native, the online environment was a challenge for me. I had never before taken an online course and as a result found myself having difficulty adjusting. Even though I have made significant improvement, I still find it very difficult to read material off the computer and end up printing most of my course work out and organizing them in 3-ring binders, which is of course characteristic of a digital immigrant.

One of the greatest benefits of actually experiencing, from a user’s perspective, an online course environment, is that it will help provide me with the needed insight as I attempt to fulfill a job requirement and goal of becoming a certified Texas Virtual School Network TxVSN instructor.

Now that I have in-depth firsthand experience in an online learning environment, I find myself excited about the opportunity to learn as much as I can about the development of an online learning course. Online learning is not something that today’s educators have much experience with (Wikiaeducation.com, 2009), but I am willing to learn more about it.

The skills and knowledge that I have gained throughout this program has undoubtedly strengthened by abilities as a technologist. It was not until I accepted the role of a district level facilitator that I was truly able to express and demonstrate the depth of my learning. It has been amazing for me to find that almost all of what this program provides has been spot on in regards to applicability. It is because of this that I feel more confident and empowered with the knowledge and experience needed to be able to influence and participate in the critical development of future technology planning.

I want to be able to help transform and create a “Sustainable classroom that allows teachers to build upon strategies that they already know and use, and focus on the technology to support and expand upon them” (Tschirgi, 2009, p. 1). In addition, I want to help

Maximize the use of digital tools to better reach essential learning goals, expanding classroom boundaries so that students gain real-world experiences and become global thinkers, and creating experiences that satisfy diverse learning styles and learner dispositions. The result can be turbo boost that takes learning into orbit – gets students ready for the 21st century world where they will work and learn (Boss & Krauss, 2007, p. 22).

**Six Course Reflections**

As I reflect upon the past 16 months of having been enrolled in the Educational Technology Leadership Master’s program, I cannot help but be extremely proud of myself for a having the courage and persistence to make it this far, and amazed as to the amount of insight and knowledge gained into the field of Educational Technology.

Having to select six courses that were the most influential in my learning was really quite simple. All of the courses in this program were useful in their own way, but there were some that really stood out and provided hands-on learning opportunities that proved to be very applicable in my actual roles as a Campus Instructional Technologist and as of recent, a district level Technology Integration Facilitator. The six courses I chose were:

* EDLD 5306 Fundamentals of Educational Technology
* EDLD 5333 Leadership for Accountability
* EDLD 5362 Informational Systems Management
* EDLD 5363 Multimedia Video Technology
* EDLD 5368 Instructional Design
* EDLD 5366 Digital Graphics

**EDLD 5306 Fundamentals of Educational Technology**

This course truly provided a wonderful foundation of information and insight into the world of Educational Technology. There were many times throughout the program, I found myself reflecting upon information and referring to articles we had read during this course as references for other courses and activities.

The introduction to and emphasis of the various technology techniques for improving instruction and learning through the application of the research on effective schools and on models of instruction were extremely beneficial to have at the start of this Master’s Program and did in fact provide a fundamental foundation from which I was able to build upon.

**EDLD 5333 Leadership for Accountability**

Understanding that this course is required for the master’s of school administration and principal certification, (which I absolutely have no desire to ever become a Principal,) I do understand that the information and experience gained through the assignments in this course will prove useful and applicable as a district Administrator in the area of Technology. In my mind, our studies of both short and long-range planning and problem solving techniques of effective school leaders were without doubt necessary areas of study for any educational leader.

At the time I took this course, I was in the position of a Campus Instructional Technologist and a member of our Campus Instructional Team and Leadership Team. These two committees dealt with (in varying degrees) and planned numerous campus initiatives that were based on state and campus data to support and justify their needs. I can remember, watching and listening to presentations from administrators that provided us with endless data, and knew enough to realize that there must have been a lot of work involved to gather the information. However, until this course I had never gone through the process of having to gather, organize, and analyze campus level data myself.

Through this course I expanded my knowledge and understanding about leadership and accountability as it pertains to the continuous improvement of a campus. As a result of creating an action plan for an area of weakness based on my campus AEIS 2009 data, it allowed me to critically think about the needs of our students and develop an action plan that addressed their needs. I now have a more profound grasp of the developmental process and purpose of the Campus Improvement Plan and the role that the Site Decision Based Management plays.

I am no longer employed with the same school district this year, which means I was unable to review and determine the effectiveness of my action plan. Nonetheless, I have gained confidence in my ability to become a more influential member of a SDBM (should the opportunity every present itself again) and know that I could help develop and maintain campus improvements that are data driven and strictly aligned to the needs of the students.

**EDLD 5362 Informational Systems Management**

I view this course to be another fundamental (introductory) course, much like EDLD 5306 Fundamentals of Educational Technology, because it provided basic foundational and/or background information. This background information and insight helped solidify my overall understanding of today’s Internet and the impact it has come to have and will continue to have in the field of education.

Throughout this course we discussed information and tools that are available on the internet; what computer networks and internet are and how they work; how the internet began and grew; addressed the scheme used on the internet; how the World Wide Web began; how people can connect to the internet; and how the internet has impacted education.

Out of all the assignments in this course, I found the Model Classroom assignment the most beneficial. I thoroughly enjoyed the opportunity to create my ideal model classroom. My plan was based on a realistic view of what could possibly be attained in 5 years based on where my campus was at the time, where our district plan for technology says it wants us to be, and of course will support both financially and in regards to infrastructure. If I ever find myself in a technology leadership position and given the responsibility of creating a technology plan and acquiring technology resources, I know I will look back on this assignment as a starting point for my wish list.

**EDLD 5363 Multimedia Video Technology**

For me this course was very demanding. The area of video planning, design, production, editing, and evaluation were by no means an area of strength for me. However, as it happened so many times throughout this program, the timeliness of this course was right on the money. As it turns out, one of the many responsibilities of my newly acquired position as a district level Technology Integration Facilitator required me to create several different videos for district wide publications. If it had not been for the information and activities of this course, I would not have been able to complete the video productions as well as I did.

My exploration and comparison of both Windows Movie Maker and Macintosh’s iMovie was incredibly useful. Prior to this course, I had already used Movie Maker, but had absolutely no prior experience with iMovie. My research and hands-on exploration of Macintosh’s iMovie software provided me with the basic skills I needed to be able to create my job related videos in a much more professional manner.

In addition to creating my own videos, I was also asked to conduct a professional development training that was going to include some aspects of video production in the classroom. Again, had it not been for the hands-on experiences and information of this course, I would not have been prepared to deliver such a training. Now, after having created several video productions on my own, I feel much more confident in my skills and abilities.

**EDLD 5368 Instructional Design**

This course provided opportunities for me to learn about and create effective instructional design for online courses and professional development. Prior to enrolling in this Master’s program, my exposure to any type of online course was extremely limited and just shy of none at all. Having said that, as I was continuing to adjust to the structure of taking online courses through this program, I really appreciated being able to learn about and study the principles of instruction design. It allowed me to appreciate the amount of work, knowledge and skills that undoubtedly went into the development of this online Master’s program.

Through my studies and experience via this Master’s program, I definitely embrace the opportunity to use online learning in my new role as a district level Technology Instructional Facilitator. Why wouldn’t I? After all, online education is defined as, “An approach to teaching and learning that utilizes Internet technologies to communicate and collaborate in an educational context. This includes technology that supplements traditional classroom training with web-based components and learning environments where the educational process is experienced online” (Blackboard, 2000). It is the perfect way of modeling for teachers, how online learning can be used with learners.

Being in a district level position within the Instructional Technology Department, I feel that an in-depth knowledge and understanding of both the benefits and disadvantages of online learning will only help me as I help to support future district initiatives in the development and deployment of future professional development opportunities. If all of the disadvantages and pitfalls of online learning are known ahead of time and all necessary measures are taken to avoid them, then all of the advantages of online learning can be taken advantage of and would ultimately result in a positive learning experience for both teacher and student.

**EDLD 5366 Digital Graphics**

The most useful assignments in this course were the ones that forced me to demonstrate my understanding of the principles and applications of graphic design, the designing of a grading rubric for a newsletter, and the creation of a newsletter that met specific criteria for branding and design.

Once again the timing of a given assignment was incredibly on the mark. My new campus Principal requested that all departments begin to develop and distribute their own newsletters, and just by coincidence, this course was providing me with the information and guidance I needed to meet his request. I was also very excited about this, because I knew that the distribution of electronic newsletters by Lead Teachers would also serve as a model for all other classroom teachers. “Teachers use computers to create assessment tools, teaching aids, and supplemental activities as well as communicate to students, parents, peers, and administrators” (Price, 2005, p. 56).

As a result, I provided a few informal professional development trainings in which I shared my new learning’s with the other department heads in order to help guide them as they developed their newsletters. I viewed this as a small and wonderful opportunity to “Help teachers keep up with new and effective practices in teaching and learning” (Mouza, 2002/2003, p. 272).

My knowledge and experience in creating a newsletter has truly come in handy for me in my new role as a district level Technology Instructional Facilitator. One of my many new responsibilities is to provide training and support for all of the district’s 97 Campus Web Coordinators. Basically, the CWC’s are responsible for maintaining their campus websites.

In an effort to effectively communicate with this very large group of people, I was asked to create and develop a newsletter. The name of the newsletter is, *CWC Power up Newsletter*, and is electronically distributed once a month. It goes without saying that the majority of the information I learned in this course has proven to be the most useful and applicable in my job.

**References**

Armstrong, S., & Warlick, D. (2004). The New Literacy: The 3Rs Evolve into the 4Es. *Technology & Learning* , 20-28.

Blackboard. (2000). *Educational Benefits of Online Learning.* Retrieved May 15, 2010, from Blackboard: [www.blackboard.com](http://www.blackboard.com/)

Boss, S., & Krauss, J. (2007). Real projects in a digital world. *Principal Leadership*, 8(4), 22-26.

Casey, J.M. (2005). Practitioner’s guide to creating a shared vision. *Leadership*, 35(1), 26-29.

Johnson, L., Levine, A., Smith, R., and Smythe, T. (2009). The 2009 Horizon Report: K-12 Edition. Austin, Texas: The New Media Consortium.

Mouza, C. (2002/2003). Learning to teach with new technology: Implications for professional development. *Journal for Research on Technology in Education*, 35(2), 272-89.

Prensky, M. (2001). Digital natives, digital immigrants: Part 1. *On the Horizon*, *9*(5), 1-6.

Prensky, M. (2006). Listen to the natives. *Educational Leadership*, 8-13

Price, B. (2005). Who’s in control of the technology-integrated school? *Principal Leadership*, 6(1), 51-56.

Southwest Independent School District. (2009, October 29). *Technology Division*. Retrieved February 7, 2010, from SWISD Hardware Standards: <http://www.swisd.net/Technology/hardware>

Tschirgi, D. (nd). What is the sustainable classroom? *Educational Technology Support Center*. Retrieved on November 17, 2009, from <http://www.esd112.org/edtech/sustainableclass.cfm>

Wahl, L., & Duffield, J. (2005). *Using Flexible technology to meet the needs of diverse learners: What teachers can do*. Retrieved February 7, 2010, from WestEd: <http://www.wedted.org/cs/we/view/rs/763>

Wikiaeducation.com. (nd). *Course management systems*. Retrieved on November 17, 2009, from <http://schoolcomputing.wikia.com/wiki/Course_Management_Systems>